

REMARKS

Favorable reconsideration and allowance of the subject application are respectfully requested. Claims 1-15 are pending in the present application, with claim 1 being independent.

Allowable Subject Matter

Applicants note with appreciation the Examiner's indication on page 5 of the outstanding Office Action that claims 4-7 and 10-12 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. For at least the reasons detailed below, Applicants respectfully submit that all pending claims should be considered allowable.

Drawings

The Examiner objected to the drawings because element 8 was listed in a foreign language. Applicants submit herewith a replacement figure, in which element 8 is labeled in English as "Weighting."

Accordingly, withdrawal of the objection is respectfully requested.

Claim Objections

The Examiner rejected to claims 1-12 because of minor informalities. Applicants have amended claims in an effort to place

them into proper form for U.S. patent practice.

Accordingly, withdrawal of the objections is respectfully requested.

Claim Rejections Under 35 U.S.C. §103

The Examiner rejected claims 1-3 and 8-9 under 35 U.S.C. §103(a) as being unpatentable over *Nikula et al.* (US 6,690,751) in view of *Kiyanagi* (US 6,731,704). These rejections are respectfully traversed insofar as they pertain to the presently pending claims.

Independent claim 1 is generally directed to a process for synchronizing an input signal including the process steps of demodulating the input signal according to a first demodulation method in relation to a first signal parameter for creating a first demodulated input signal, correlating the first demodulated input signal with a first comparison signal that depends upon the first demodulation method to determine a time offset between the first demodulated input signal and the first comparison signal, and time-wise shifting the input signal in accordance with the time-wise offset determined by the correlation.

Nikula et al. is directed to a method and receiver for receiving and decoding signals modulated with different modulation methods, whereby after demodulation it is determined whether the correct demodulation method was selected.

Kiyanagi is directed to an apparatus and bit-shift method for

eliminating interference of cross polarization in a cross polarization transmitting system, which is a radio transmission system that transmits data using two different polarized waves as carrier waves of a common frequency.

In rejecting independent claim 1, the Examiner acknowledges that *Nikula et al.* fails to teach the step of correlating the first demodulated input signal with a first comparison signal to determine a time offset between the first demodulated input signal and the first comparison signal; and time-wise shifting the input signal in accordance with the time-wise offset determined by the correlation. The Examiner, however, cites *Kyanagi* for support thereof.

Applicants respectfully submit that the Examiner failed to establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met: (1) there must be some suggestion of motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference must teach or suggest all the claim limitations, see *In re Vaeck*, 947 F.2d 48, 20 USPQ2d 1438 (Fed.Cir.1991).

As noted above, the Examiner alleges that *Kiyanagi* discloses the deficiencies of *Nikula et al.* and states on page 3 of the

outstanding Office Action that "Kiyanagi discloses correlating the first demodulated input signal with a first comparison [sic] to determine a time offset between the first demodulated input signal and the first comparison signal...."

Referring to col. 2, lines 7-43 of *Kiyanagi*, which the Examiner cites in the Office Action, there is shown in Fig. 14 an apparatus that eliminates a cross polarization interference-component from one of a received polarized plain waves. After the received signal is demodulated by, for example, the demodulator 91c it is then provided to a transversal equalizer 91d that equalizes and eliminates multipath-components by correlation arithmetic of shifted digital signals. An amount of interference is extracted by the equalizer 91d and is input to controller 91e.

This transversal equalizer (either 91d or 92d) does not equalize or correlate the inputted demodulated signal with another signal. Much less another signal that depends upon a first demodulation method (which feature of claim 1 the Examiner appears to have ignored). Thus, the alleged combination of *Nikula et al.* and *Kiyanagi* fail to teach or suggest all of the features of the claims, as is required in order to substantiate an obviousness rejection.

Dependent claims 2-15 should be considered allowable at least for depending from an allowable base claim.

Accordingly, in view of the above discussion, Applicants

respectfully request that the Examiner withdraw the rejection.

Conclusion


In view of the above amendments and remarks, this application appears to be in condition for allowance and the Examiner is, therefore, requested to reexamine the application and pass the claims to issue.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Martin Geissler (Reg. 51,011) at telephone number (703) 205-8000, which is located in the Washington, DC area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: One (1) Replacement Drawing (Figs. 1-2)